

**IN THE SPECIFICATION:**

**Please amend the paragraph on page 3, lines 10-19, to read as follows:**

b1 To widen the light distribution in the horizontal direction, although it is effective to make an effective refractive index difference parallel to the layers between inside and outside the stripes ( $\Delta n$ ) small, with the construction of the past, that is, one of a construction satisfying either or both of the conditions of four or fewer wells of the MQW active layer or a layer thickness in the flat part of the p-AlGaInP cladding layer of less than 300nm, it is not possible to achieve a sufficiently small value of  $\Delta n$ , thereby preventing enhanced self-sustained pulsating operation.

**IN THE CLAIMS:**

**Please amend claim 1 to read as follows:**

- b2 sub c1 > 1. (Twice Amended) A self-sustained pulsating laser diode having a double-heterostructure comprising:
- a first cladding layer of a first conductivity type;
  - a multi-quantum well active layer; and
  - a second cladding layer of a second conductivity type and both the first cladding layer and the second cladding layer being arranged on a semiconductor substrate of the first conductivity type, the number of said quantum wells being at least 5 and no greater than 10; and a layer thickness of a flat part of said second cladding layer having a current blocking structure being at least 300nm and no greater than 500nm; and a carrier density in said flat part of said second cladding layer having a current blocking structure being at least  $1 \times 10^{17} \text{ cm}^{-3}$  and no greater than  $5 \times 10^{17} \text{ cm}^{-3}$ .